IN THE SPECIFICATION:

At page 52, line 21, delete "Quidel" and insert therefor --QUIDEL--.

At page 53, line 12, delete "Quidel" and insert therefor --QUIDEL--; and

line 15, delete "Quidel" and insert therefor --QUIDEL--.

At page 60, lines 5-6, delete "12301 Parklawn Drive, Rockville, Maryland, 20852" and insert therefor -- 10801 University Boulevard, Manassas, Virginia 20110-2209--.

IN THE TITLE:

After "DISEASE", insert --USING C5 ANTIBODIES--.

REMARKS

Amendments

The claims were amended for clarity. Support for the amendments can be found throughout the specification. Support for the amendment to Claim 1 found, *inter alia,* at page 29, lines 14-21. Claims 2, 4, 6, 8, 9, 10, and 14 and the specification were amended in accordance with the Examiner's suggestion. Support for new claim 18 can be found throughout the specification. Support for new claim 19 can be found at least at page 59. Accordingly, no new matter is added by this Amendment.

Title of the Invention

Applicants respectfully submit that the amended title obviates the Examiner's rejection thereto.

Informalities

Applicants have reviewed the application for spelling, trademarks, and informal errors. It is believed that the application is in condition for allowance. In addition, Applicants have amended the specification to reflect the current address of ATCC, as suggested by the Examiner.

Rejection under 35 U.S.C. § 112, first paragraph

Applicants respectfully traverse the rejection of claims 1-14 under 35 U.S.C. § 112, first paragraph.

The Examiner states that the specification does not support the claim language "does not interfere with cellular immune responses seen after immunizing mice with bovine type II collagen." The Examiner asserts that Example 3 and pages 50-51 do not support this claim language because they refer only to mice and not to the "new subgenus" of "human and non-human patients." Moreover, the Examiner asserts that this "negative limitation" introduces new concepts. The Examiner concludes that Applicants are claiming a subgenus not supported by the specification as filed and that cancellation of new matter is required.

Soley to expedite prosecution, applicants have cancelled the assertedly objectionable language rendering the instant rejection moot. However, Applicants reserve the right to pursue the cancelled subject matter in a continuation application.

Claims 1-14 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Examiner states that there is not sufficient direction and guidance to enable "C5 blockers" used to treat joint inflammation in "human and non-human patients... wherein the C5 blockers does not block the function of early complement components with or without the ability to interfere with cellular immune responses seen after immunizing mice with bovine type II collagen." (Office Action at para. 9.)

Soley to expedite prosecution, Applicants have amended claim 1 to reflect that the claimed method for treating established joint inflammation in a patient in need thereof comprises administering to the patient an effective anti-inflammatory amount of a composition comprising a purified antibody specific against C5, in accordance with the Examiner's suggestion. In view of this amendment, Applicants respectfully submit that the instant rejection is moot and request it be withdrawn.

Rejection under 35 U.S.C. § 112, second paragraph

Applicants respectfully traverse the rejection of Claims 1-14 as allegedly being indefinite.

The Examiner states, in Paragraph A, that the recitation of "C5 blockers" is indefinite as to the intended activity of the inhibitors employed in the claimed method. Applicants have deleted the objected to language.

In Paragraph B, the claims are rejected because it is allegedly unclear how the language "does not interfere with cellular immune responses seen after immunizing mice with bovine type II collagen" affects the metes and bounds of "C5 blockers which do not block the functions of early complement components" in patients. Although applicants respectfully disagree with the rejection, in an effort to expedite the prosecution of this application, applicants have deleted the objected to language.

In Paragraph C, the Examiner states that the recitation of "substantially" renders claims 2-14 indefinite. Applicants have amended the claims to delete "substantially" thereby obviating the instant rejection.

Rejection under 35 U.S. C. §§ 102(b) and/or 103

Applicants respectfully traverse the rejection of Claims 1-10 and 14 under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103 as obvious over Sindelar et al at least for the following reasons.

The Examiner's states Sindelar teaches methods of treating patients with immune disorders involving undesirable or inappropriate complement activity using dihydrobenzofurans and spirobenzofuran-2(3h)-cycloalkanes and their open chain intermediates.

However the Sindelar et al. reference nowhere discloses or suggests a method of treating established joint inflammation using any antibodies. Applicants respectfully request the rejection over Sinderal et al. be withdrawn.

Rejections under 35 U.S. C. § 103

Applicants respectfully traverse the rejection of Claims 1-14 under 35 U.S.C. § 103 as allegedly being unpatentable over Sindelar et al. in view of Auda et al., Wurzner et al., and Montz et al. at least for the following reasons

The Examiner states that Sindelar et al. teach methods for treating established joint inflammation comprising the administration of an effective amount of a C5 blocker. Auda et al. is cited to teach the measurement of complement activation products in patients suffering chronic rheumatic diseases to predict patient clinical status. Moreover, it is cited to teach monitoring C5b-9 levels in patients to provide a more sensitive indicator of patient status. Wurzner et al. is cited to teach the inhibition of terminal C components by monoclonal antibodies specific for C5. Montz et al. and Wurzner et al. are further cited to teach C5 inhibitors, which do not effect the early C components. The Examiner concludes that one of ordinary skill in the art would have

been motivated to modify the teachings of Sindelar et al. with the teachings of Auda et al., Montz et al and Wurzner et al. to use C5 inhibitory antibodies to inhibit inflammatory joint disease. The Examiner states that the motivation to combine the references is in the use of analogous compounds to those taught in Sindelar et al. for the inhibition of C5 activity with a reasonable expectation of success. (See Office Action mailed March 31, 1996.)

Applicants respectfully submit that the Sindelar et al. patent is directed to chemically synthesized non-protein organic compounds for the inhibition and/or suppression of immune activity. Sindelar et al. nowhere disclose or suggest that antibodies specific against C5 would be effective to inhibit established joint inflammation.

Applicants respectfully submit that the deficiencies of Sindelar et al. are not cured by Wurzner et al. and Montz et al. at least for the following reasons. While Wurzner et al. discuss the production of two monoclonal antibodies against C5, nowhere is the specific use of these monoclonal antibodies to treat joint inflammation disclosed or suggested. Montz et al. discuss experiments to determine the potential role of endogenously synthesized C5 and subsequently generated C5a in an autologous T cell stimulation. Montz is related to determining the role of anti-C5 against T cell proliferation, not to treating joint inflammation. Therefore, neither Wurnzer et al. nor Montz et al. cure the deficiency of Sindlar et al.

Applicants respectfully submit that the compounds of Sindelar et al. and Wurzner et al. and Montz et al. are not "analogous," as asserted by the Examiner. To the contrary, the Sindelar et al. compounds are directed to synthetically produced organic compounds. Conversly, the presently claimed antibodies are proteins produced in response to an antigen. Nothing in any of the cited references suggests that the synthetic organic compounds of Sindelar et al. are functionally equivalent or analogous with the antibodies of Wurzner et al. or Montz et al. Applicants respectfully submit that the asserted motivation to combine the references is lacking. Modification of the teachings of a prior art reference is not established by the teachings of a second prior art reference "unless the prior art suggests the desirability of the modification." *In re Fritch,* 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). It is respectfully submitted that the suggested combination of the cited prior art is not based upon a desirable modification.

Auda et al. does nothing to remedy the deficiencies of Sindelar et al., Wurzner et al., and Montz et al. Auda et al. merely describes measuring complement activation products in patients. It does not disclose or suggest the claimed method of treating established joint inflammation by administering to a patient a composition comprising a purified antibody specific against C5.

At least for the reasons set forth above, applicants respectfully request withdrawal of the instant rejection.

Applicants respectfully traverse the rejection of Claims 1-14 under 35 U.S.C. § 103 as allegedly being unpatentable over Sindelar et al. in view of Auda et al., Wurzner et al., and Montz et al., further in view of Rollins et al. at least for the following reasons.

The Examiner states that Rollins et al. is added to provide further teachings and evidence that C5-specific antibodies had the property of inhibiting complement inflammatory conditions in humans at the relevant time.

The Sindelar et al., Auda et al., Wurzner et al., and Montz et al. references are discussed above. Applicants respectfully submit that Rollins et al. is improperly applied against the pending claims. Rollins et al. has an issue date of December 29, 1998, and a filing date of December 21, 1995. These dates are after Applicants' filing date of September 23, 1994. Therefore, Rollins et al. is not prior art and can not be applied against the instant claims.

Withdrawal of the rejection is respectfully requested.

Conclusion

Applicants respectfully submit application is now in condition for allowance and respectfully request a notice to that affect. The Examiner is invited to call the undersigned at the number listed below

should he believe such would expedite the prosecution of this application.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 01-0483. If a fee is required for an extension of time under 37 C.F.R. § 1. 136 not accounted for above or in the Petition filed concurrently herewith, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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